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In re Berg (CA FC) 46 USPQ2d 1226 (3/30/1998)

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In re Berg

U.S. Court of Appeals Federal Circuit 46 USPQ2d 1226

Decided March 30, 1998

No. 97-1367

Headnotes

PATENTS

1. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

Application claiming genus which contains species claimed in issued patent is not entitled to "two-way" test for obviousness-type double patenting, since instant case, in which both applications were filed on same date, does not present more typical scenario in which two-way test applies despite common inventive entities, namely when later-filed improvement patent issues before earlier-filed basic invention, since specifications of application and issued patent are identical, disclosures are almost exactly alike, and invention described in patent thus is not "totally separate" from that of application, and since inventions disclosed in both sets of claims had been completed before either application was filed.

2. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

Patent applicant is not entitled to exception of "two-way" test for obviousness-type double patenting if applicant can file all of its claims in one application but elects not to.

3. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

Applicants' simultaneous filing of two separate applications that could have been filed as one application disqualifies applicants

Page 1227

from "two-way" test for obviousness-type double patenting, since applicants should be viewed as having taken calculated risk that, by simultaneously filing two separate applications, they might gain advantage of quickly issued narrow patent as well as advantage of broader application which took longer to issue as patent but consequently had later expiration date, and since effectively extending patent term is precisely result that doctrine of obviousness-type double patenting was created to prevent.

4. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

"Two-way" test for obviousness-type double patenting can only apply when applicant could not avoid separate filings, and then only if Patent and Trademark Office controlled rates of prosecution to cause later- filed species claims to issue before claims for genus in earlier application; question of control is irrelevant in present case, since applicants simultaneously filed two separate applications that could have been filed as one.

5. Patentability/Validity -- Anticipation -- Double patenting (§ 115.0708)

Holding that applicants are not entitled to exception of "two-way" test for obviousness-type double patenting does not produce unfair result in case in which applicants chose to simultaneously file two applications containing almost identical disclosures, with each disclosure supporting both sets of claims, since each of several options available to applicant filing both genus and species claims has distinct advantages and disadvantages, but none of those options are unreasonable, and since applicants in present case, by their manner of filing, assumed risk that they would be required to terminally disclaim.

Case History and Disposition:

Page 1227

Appeal from the U.S. Patent and Trademark Office, Board of Patent Appeals and Interferences.

Patent application of Todd A. Berg, Donley D. Rowenhorst, James G. Berg, and William K. Leonard, serial no. 07/918,360, filed July 23, 1992. From decision upholding examiner's rejection of all claims in application on ground of obviousness-type double patenting, applicants appeal. Affirmed.

Prior decision: 43 USPQ2d 1703.

Attorneys:

Charles L. Gholz and Alton D. Rollins, of Spivak, McClelland, Maier & Neustadt, Arlington, Va., for appellant.

John M. Whealan, associate solicitor, U.S. Patent and Trademark Office; Nancy J. Link, solicitor, Albin F. Drost, deputy solicitor, and David J. Ball Jr., associate solicitor, for appellee.

Judge:

Before Michel, Clevenger, and Gajarsa, circuit judges.

Opinion Text**Opinion By:**

Michel, J.

Todd A. Berg, Donley D. Rowenhorst, James G. Berg and William K. Leonard (collectively, "Berg") appeal the decision of the United States Patent and Trademark Office's (the "PTO's") Board of Patent Appeals and Interferences (the "Board") upholding the examiner's rejection of all the claims of patent application Serial No. 07/918,360 (the "application"), based on certain claims of U.S. Patent No. 5,201,916 previously issued to Berg (the "'916 patent"), on the ground of obviousness-type double patenting. *In re Berg*, No. 94-2492 (B.P.A.I. Feb. 12, 1997). This case was submitted for our decision following oral argument on January 5, 1998. Because the Board did not err in applying the "one-way" test, rather than the "two-way" test, to the genus claims of the simultaneously filed application in light of the nearly identical species claims of the patent to the same four inventors, we affirm.

BACKGROUND

The application at issue was filed on July 23, 1992. On the same day, the same four inventors filed a second application that issued as the '916 patent on April 13, 1993. Both the '916 patent and the application are assigned to the inventors' employer, Minnesota Mining and Manufacturing Company ("3M"). The specifications of the '916 patent and the application are practically identical. Each discloses a molding method for preparing an alpha alumina abrasive particle suitable for use as an abrasive grit in an abrasive composition and the composition resulting from performing the method. The disclosed molding method includes a step of providing a mold that has at least one surface that provides an opening to a cavity with a specified shape. A liquid dispersion including particles to be converted to alpha alumina is then introduced through the opening into the mold cavity. Both the '916 patent and the application describe a preferred embodiment in which the exposed surface of the liquid dispersion in the cavity does not extend substantially beyond the plane of the opening, which assures that abrasive particles prepared by the process are substantially uniform in shape and size. This effect is achieved by wiping away any portion of the liquid dispersion in the cavity that extends

Page 1228

above the plane of the mold surface. In contrast, in a disclosed but non-preferred embodiment of the invention, the dispersion is simply permitted to extend above the mold surface. Both the '916 patent and the application describe the preferred "wiping" embodiment as enhancing the beneficial grinding performance properties of the composition which employs the abrasive particles so produced.

The application claims that matured into the '916 patent were allowed by the examiner in a first Office action on September 22, 1992. Six days thereafter, the examiner entered an Office action rejecting the claims of the Berg application on the sole ground of obviousness-type double patenting over certain claims of the soon-to-issue '916 patent. Berg did not dispute that the claims of the application were obvious in light of the '916 patent claims, but Berg refused to enter a terminal disclaimer in the application, thus prompting a final rejection which Berg appealed to the Board.

The Board affirmed the examiner's rejection based on obviousness-type double patenting, ruling that claim 1 of the '916 patent was a species of the genus claimed in claim 1 of the application. 1 The Board also found that Berg could have put all of the claims in the same application but elected not to, and hence chose to assume the risk as to which application would complete prosecution first. The Board concluded that Berg effectively controlled the application's rate of prosecution compared to the '916

patent and, therefore, the one-way test for obviousness-type double patenting applied. Under that test, the Board found that Berg's application claims were obvious in light of the '916 patent claims. Therefore, Berg had to file a terminal disclaimer in order for its application claims to issue. As Berg had refused to file a terminal disclaimer, the Board sustained the rejection, and Berg timely appealed to this court. We have jurisdiction under 28 U.S.C. Section 1295(a)(4)(A) (1994).

DISCUSSION

I. The Relationship of the Claims

The invention defined in claim 1 of the Berg application is almost identical to that defined in claim 1 of the '916 patent. The only potentially patentably distinct difference is found in step (c). In the '916 patent,

Page 1229

step (c) requires "introducing said dispersion into said mold cavity *such that no exposed surface of said dispersion extends substantially beyond said plane of said first surface of said mold*," (emphasis added). Step (c) of the Berg application, however, only requires "introducing said dispersion into said mold cavity." The application claim, therefore, encompasses the '916 patent claim, and the '916 patent claim anticipates the application claim. The relationship of the application claim to the '916 patent claim, accordingly, is one of genus to species.

II. Obviousness-Type Double Patenting Rejections

Obviousness-type double patenting is a judge-made doctrine that prevents an extension of the patent right beyond the statutory time limit. It requires rejection of an application claim when the claimed subject matter is not patentably distinct from the subject matter claimed in a commonly owned patent. See *In re Braat*, 937 F.2d 589, 592, 19 USPQ2d 1289, 1291-92 (Fed. Cir. 1991). Its purpose is to prevent an unjustified extension of the term of the right to exclude granted by a patent by allowing a second patent claiming an obvious variant of the same invention to issue to the same owner later. See *In re Goodman*, 11 F.3d 1046, 1052, 29 USPQ2d 2010, 2015 (Fed. Cir. 1993). Obviousness-type double patenting is a question of law reviewed *de novo* by this court. See *id.*; see also *General Foods v. Studiengesellschaft Kohl MbH*, 972 F.2d 1272, 1277, 23 USPQ2d 1839, 1843 (Fed. Cir. 1992).

Generally, a "one-way" test has been applied to determine obviousness-type double patenting. Under that test, the examiner asks whether the application claims are obvious over the patent claims. In a recent case, with unusual circumstances, however, this court instead applied a "two-way" test. See *Braat*, 937 F.2d at 592, 19 USPQ2d at 1291-92. Under the two-way test, the examiner also asks whether the patent claims are obvious over the application claims. If not, the application claims later may be allowed. Thus, when the two-way test applies, some claims may be allowed that would have been rejected under the one-way test. One of our predecessor courts, the Court of Customs and Patent Appeals, also at various times applied an analysis similar to that used in *Braat* to determine obviousness-type double patenting. See *In re Borah*, 345 F.2d 1009, 1009, 148 USPQ 213, 214 (CCPA 1966); *In re Calvert*, 97 F.2d 638, 640, 38 USPQ 184, 185 (CCPA 1938). The essential concern was to prevent rejections for obviousness-type double patenting when the applicants filed first for a basic invention and later for an improvement, but, through no fault of the applicants, the PTO decided the applications in reverse order of filing, rejecting the basic application although it would have been allowed if the applications had been decided in the order of their filing. The question of whether the "one-way" test or the "two-way" test applies, the dispositive issue here, is one of law and therefore reviewed by this court without deference. See *In re Emert*, 124 F.3d 1458, 1460, 44 USPQ2d 1149, 1151 (Fed. Cir. 1997).

Under the one-way test, if the scope of the application and the patent claims is not identical, the court must ask whether the former defines merely an obvious variation of the latter. See *Goodman* 11 F.3d at 1052, 29 USPQ2d at 2015-16. If the application claim is not patentably distinct, in order to

overcome the double patenting rejection, the applicant must file a "terminal disclaimer," foregoing that portion of the term of the second patent that extends beyond the term of the first. *See id.* at 1052, 29 USPO2d at 2016; *see also Emert*, 124 F.3d at 1461-62, 44 USPO2d at 1152.

Under special circumstances, however, this court and the Court of Customs and Patent Appeals have both made an exception and instead have applied a two-way test. Specifically, in *Braat*, this court examined the application claim and the patent claim to determine whether each was obvious in view of the other, rather than considering only whether the application claim was patentably distinct from the patent claim. *See* 937 F.2d at 593, 19 USPO2d at 1292; *see also Borah*, 345 F.2d at 1009, 148 USPO at 214; *Calvert*, 97 F.2d at 640, 38 USPQ at 185. Since *Braat*, many patent applicants facing an obviousness-type double patenting rejection under the one-way test have argued that they actually are entitled to the two-way test. The two-way test, however, is a narrow exception to the general rule of the one-way test. Indeed, the primary basis for the *Braat* decision -- different inventive entities -- was removed by the Patent Law Amendments Act of 1984 (the "1984 Act"). Nevertheless, the notion survives that in certain unusual circumstances, the applicant should receive the benefit of the two-way test. The question then is: when?

III. Application of the Obviousness-Type Double Patenting Rules to this Case

Berg does not argue here that it survives the one-way test, i.e., that its application

Page 1230

claims are nonobvious in light of the claims of the '916 patent, but only that it is entitled to application of the two-way test because it filed the two applications simultaneously, and therefore cannot be responsible for their rates of prosecution through the PTO. According to Berg, under a two-way test, the rejection of its application claims cannot be sustained because the invention of claim 1 of the '916 patent is not obvious in light of claim 1 of the application. Because we hold that the Board was correct in applying the one-way test, however, we do not reach the issue of whether Berg's '916 patent claims are patentably distinct over the application claims.

In making the argument that it is not responsible for the relative rates of prosecution, Berg relies on cases such as *Borah* and *Calvert* in which an earlier-filed basic application was rejected based on a commonly-owned, later-filed improvement patent. *See Borah*, 354 F.2d at 1009, 148 USPO at 214; *Calvert*, 97 F.2d at 640, 38 USPQ at 185. In these cases, the PTO took longer to examine the basic application than it did the improvement, causing the applications to issue in reverse order of filing. Berg asserts that its situation is analogous to those of the applicants in cases like *Borah* and *Calvert* because, as it filed the two applications simultaneously, it did not exercise control over their progress through the PTO. According to Berg, therefore, the PTO must be deemed responsible for the species claims issuing prior to the genus claims, thus entitling Berg to a patent on the genus claims without a terminal disclaimer. 3

The Board took the opposite view: the PTO cannot be seen as controlling the rates of prosecution because Berg chose to file its applications separately but simultaneously. The Board further found that there is no apparent reason why appellants were prevented from presenting claims to the generic invention for examination in the application which matured into the issued Berg patent wherein claims to the best mode were presented. Further, like *Schneller*, subject matter covered by the claims of the Berg application (i.e., the best mode of practicing the invention) is fully disclosed and expressly claimed in the claims of the Berg patent.

Berg, slip op. 13. The Board held that "the term of patent protection for the best mode would be unjustifiably extended beyond the statutory time limit by allowance of the herein appealed claims." *Id.*

Although the decision of the Board affirming the application of the one-way test rather than the two-way test to Berg's application is correct, we hold, however, that this case is not appropriate for application of a "control of prosecution rates" analysis to determine whether Berg is entitled to the two-way test. Rather, we base our affirmance on the second stated rationale of the Board: because Berg

could have filed the claims of its separate applications in a single application, and it simply chose to file two applications despite nearly identical disclosures, Berg is not entitled to the two-way test.

A. The Special Circumstances Triggering the Two-Way Test are Not Present in Berg's Case

[1] Berg relies on *Braat* to support application of the two-way test. *Braat* was an unusual case; moreover, its factual situation is not likely to be repeated since the 1984 Act went into effect. Even assuming that *Braat* retains some vitality, it is, nevertheless, distinguishable. In *Braat* the common assignee could not have filed both sets of claims together because the inventive entity named in the application did not invent the subject matter of all the patent claims and vice-versa. 4 See *Braat*, 937 F.2d at 594, 19 USPQ2d at 1293. In addition, in *Braat* the "patent invention . . . [was] totally separate from that of [the application], and could conceivably have been developed earlier rather than later." *Id.* at 593, 19 USPQ2d at 1292. The court in *Braat*, however, emphasized the more typical scenario in which, despite common inventive entities, the two-way test applied: "when a *later-filed improvement* patent issues before an *earlier filed basic* invention." *Id.* (emphasis added); accord *Borah*, 345 F.2d at 1009, 148 USPQ at 214 (allowing the earlier filed but later allowed basic patent application to issue without a terminal disclaimer because the two applications could not have been filed as

Page 1231

one since the improvements were not made until after the application on the basic invention was filed); see also *Calvert*, 97 F.2d at 640, 38 USPQ at 185 (allowing an earlier filed patent application for generic invention to issue without a terminal disclaimer after a later filed improvement patent).

Furthermore, in the present case, unlike *Braat*, the specifications of the Berg application and of the '916 patent are identical; the two disclosures are almost exactly alike. The invention described in claim 1 of the '916 patent, therefore, is anything but "totally separate" from that of the Berg application. In fact, the preferred embodiment of practicing the invention disclosed in the written description of both the application and the '916 patent is claimed in claim 1 of the '916 patent. In addition, both the '916 patent and the application list the same inventive entity, i.e., the same four inventors. Thus all of the excuses accepted by the court in *Braat* are absent here. Finally, unlike *Borah*, the inventions disclosed in both sets of claims had been completed before either application was filed.

[2] For its own reasons, Berg chose to file two applications even though conventional practice presumably would have counseled filing one application. We hold, therefore, that if an applicant can file all of its claims in one application, 5 but elects not to, it is not entitled to the exception of the two-way test. 6

B. Berg's Prosecution Facts Are Close to Those in Goodman

Contrary to Berg's assertions, the facts of the present case are close to those in *Goodman*, a case in which we applied the standard one-way test. In *Goodman*, the applicant filed both species and genus claims in the same application. The examiner allowed the species claims but rejected the genus claims. Rather than appealing the rejection of the genus claims, the applicant permitted the species claims to issue upon allowance and continued to prosecute the genus claims in a continuation application. The genus claims were subsequently rejected for obviousness-type double patenting in light of the now issued species claims. Rather than file a terminal disclaimer, the applicant appealed to the Board and then to this court. See *Goodman*, 11 F.3d at 1049, 29 USPQ2d at 2013. This court held that "[a]lthough application claims 12 and 13 form the genus containing the species of patent claim 3, PTO actions did not *dictate the rate of prosecution*. Rather, appellant chose to file a continuation and seek early issuance of the narrow species claims." *Id.* at 1053, 29 USPQ2d at 2016 (emphasis added). Berg asserts that by filing two separate applications simultaneously, it did not dictate the rates of prosecution but left the control thereof to the PTO; therefore, its case differs from *Goodman*, and it should not be required to file a terminal disclaimer in order for its application to be allowed. Indeed, Berg contends that it chose to file two separate applications precisely to avoid what it considered the harsh result in *Goodman*: the claims which required further prosecution were subsequently rejected

for obviousness-type double patenting in view of the issued claims.

[3] However, simultaneously filing two separate applications 7 that could have been filed as one application disqualifies Berg from the two-way test. 8 Rather, Berg should be viewed as having taken a calculated risk that, by simultaneously filing two separate applications, it might gain the advantage of a quickly issued, narrow patent and also the advantage of a broader application which took longer to issue as a patent but consequently

Page 1232

had a later expiration date. 9 Effectively extending the patent term, however, is precisely the result that the doctrine of obviousness-type double patenting was created to prevent. See *Goodman*, 11 F.3d at 1051, 29 USPQ2d at 2015.

[4] Here, the examiner and the Board were correct in applying the one-way test. The two-way exception can only apply when the applicant could not avoid separate filings, and even then, only if the PTO controlled the rates of prosecution to cause the later filed species claims to issue before the claims for a genus in an earlier application. This was the situation in *Borah*. In Berg's case, the two applications could have been filed as one, so it is irrelevant to our disposition who actually controlled the respective rates of prosecution. Because Berg could have filed one application, Berg's case is controlled by factual analogy to and in principle by *Goodman*.

C. The Options Available to Berg Were Reasonable

Berg argues that such an outcome is unfair as the applicant is forced to choose between unattractive alternatives. Such an applicant, however, has several options, none of which is unreasonable. If a potential applicant is unsure whether it has more than one patentably distinct set of claims, the PTO advises that it file all of the claims as one application. 10 Then, as examination proceeds, if the PTO determines that more than one distinct invention was claimed in a single application, 35 U.S.C. Section 121 authorizes the Commissioner to restrict the claims in the application to a single invention. 11 See Manual of Patent Examining Procedure, 6th ed., rev. 1, Section 806 ("MPEP") (where inventions are independent, restriction to one thereof is ordinarily proper; where inventions are related as disclosed but are distinct as claimed, restriction may be proper). If the claims are so restricted, one or more divisional applications can then be filed containing the claims that were the subject of restriction. When such a divisional application is filed, the PTO is prohibited from using the claims of the patent issuing on the application that prompted the restriction requirement as a reference against the claims of any divisional application. See 35 U.S.C. Section 121; see also MPEP Section 804.01. Hence, by filing all of its related claims in one application, such an applicant is protected from an obviousness-type double patenting rejection if the PTO later determines the applicant has submitted claims to more than one patentable invention.

Berg, however, maintains that had it filed one application containing both the genus and species claims as the PTO suggests, it still might have been subjected to an obviousness-type double patenting rejection, like the *Goodman* applicants. Specifically, Berg asserts that if the examiner had *failed* to make a restriction requirement pursuant to 35 U.S.C. Section 121 (presumably because the claims did not disclose two or more patentably distinct inventions), but had allowed the species claims and rejected the genus claims, Berg would have faced the unattractive alternatives of either appealing the rejection of the genus claims, meanwhile delaying the issuance of the species claims, or allowing

Page 1233

the species claims to issue and pursuing the genus claims in a continuation application. 12 Under the first alternative, considering the time for appeal to the Board and then potentially to this court, presumably it could be several years before any of the applicant's claims issued. According to Berg, however, the second alternative has serious drawbacks as well. Under the second alternative, should the species claims issue prior to conclusion of examination of the genus claims, once again the species claims would be used in an obviousness-type double patenting rejection of the genus claims,

and the genus claims would thus be subject to a terminal disclaimer requirement as a condition of issuance. See *Goodman*, 11 F.3d at 1053, 29 USPQ2d at 2016. Berg fails to note, however, that "the use of a terminal disclaimer in overcoming a nonstatutory double patenting rejection is in the public interest because it encourages the disclosure of additional developments, the earlier filing of applications, and the earlier expiration of patents whereby the inventions covered become freely available to the public." MPEP Section 804.02.

Furthermore, the problem with an obviousness-type double patenting rejection under the second alternative is the resultant terminal disclaimer. Its duration, however, could be diminished by promptly filing and prosecuting the continuation application containing the genus claims once notice of allowance on the species claims is entered. ¹³ In such a situation, presumably the durational effect of any terminal disclaimer would be minimized. The choice is the applicant's and thus is not unfair. If an applicant could have filed both sets of claims in a single application because the disclosure of the first application supports the second set of claims, then pursuant to this case and *Goodman*, the one-way test is appropriate to determine if a rejection for obviousness-type double patenting should be sustained.

If, on the other hand, an applicant could not have filed both sets of claims in one application -- for example, because the second application claimed an invention that was not adequately disclosed in the first application -- but the first application was delayed in prosecution causing the second application to issue as a patent first, then one would expect that the "control test" as discussed in *Borah* would be applied to determine whether the applicant or the PTO is responsible for the delay. Under this scenario, the one-way test is appropriate to determine whether a rejection for obviousness-type double patenting will be sustained if the applicant is found responsible for the delay in prosecution of the first-filed application. The two-way test may be appropriate, however, in the unusual circumstance that the PTO is solely responsible for the delay in causing the second-filed application to issue prior to the first.

[5] Each of the options for an applicant filing both genus and species claims has distinct advantages and disadvantages. In the present case, Berg deliberately chose to file simultaneously two applications containing almost identical disclosures, with each disclosure supporting both sets of claims. Berg therefore took the risk that it would be required terminally to disclaim. It filed so knowing the law and the likely outcome. The options are neither unfair, nor inconsistent with settled law, and Berg must accept the foreseeable legal consequences of its choice. To embrace Berg's argument would substantially relax the standards of the obviousness-type double patenting doctrine in all cases of simultaneous filing. This we decline to do.

CONCLUSION

Because of Berg's refusal to submit a terminal disclaimer, all of the genus claims in the Berg application are unpatentable over the species claims of Berg's '916 patent under the doctrine of obviousness-type double patenting because the one-way test applies here as both genus and species claims could have been filed in a single application. For the above reason, the decision of the Board is

AFFIRMED .

Footnotes

Footnote 1. Both the Board and Berg treat claim 1 of the '916 patent and claim 1 of the application as representative of the other pending claims, and we do as well.

Footnote 2. Both claim 1 from the application and from the '916 patent are reproduced below.
(application omitted)

Footnote 3. Furthermore, argues Berg, it took over four years from the date the application was filed until the Board rendered its decision affirming the examiner's rejection. If Berg now were to file a

terminal disclaimer, it would forfeit from the term of its patent those four years in addition to the time it takes for this appeal to be decided.

Footnote 4. Both applications were filed before the 1984 Act took effect. Prior to the 1984 Act, inventors could not apply jointly unless each made an inventive contribution to the subject matter of every claim. Under the 1984 Act, 35 U.S.C. Section 116 was amended so that "[i]nventors may apply for a patent jointly even though . . . each did not make a contribution to the subject matter of every claim."

Footnote 5. For example, an applicant could have filed all of its claims in one application when the disclosure of the earlier filed application will support the claims in the later filed application.

Footnote 6. Furthermore, even in a case where the inventions could not have been filed in a single application, if the applicant thereafter controlled the respective rates of prosecution to cause the species or improvement claims to issue prior to the genus or basic invention claims as could have been done by, e.g., filing the genus claims long after the species claims even though the two were invented at nearly the same time or the genus claims were invented first, or by filing numerous continuations in the genus application while failing to respond substantively to PTO Office actions, such applicant seems not to be entitled to the two-way test under settled case law. *See, e.g., Emert*, 124 F.3d at 1461, 44 USPQ2d at 1152.

Footnote 7. Although almost identical, Berg's applications are not related as by continuation, continuation-in-part, or divisional, and neither references the other. Berg's actions in filing each of these two applications without informing the PTO of the existence of the other is misleading to the examiner because Berg's actions imply that each application is independent and patentably distinct.

Footnote 8. Allowing what Berg suggests might encourage practitioners to file simultaneously multiple applications with identical disclosures when only one was needed and would burden the PTO with the responsibility of cross-referencing all of the related applications in order to determine if a terminal disclaimer was required.

Footnote 9. As the two applications were filed prior to June 8, 1995, Berg will be entitled to a patent term of the longer of 17 years from the date of issue or 20 years from the date of filing of the '916 patent and on any patent that should issue from the application. Under the current rules, however, an applicant in the scenario like Berg's would be entitled only to 20 years from the date of filing for any patent that issued from applications filed after June 8, 1995. Hence, under the current rules, the length of time an application remains in prosecution simply diminishes the effective length of the patent term accordingly.

Footnote 10. When two sets of claims filed in the same application are patentably distinct or represent independent inventions, the examiner is to issue a restriction requirement. *See Manual of Patent Examining Procedure*, 6th ed., rev. 1, Sections 803, 806.

Footnote 11. 35 U.S.C. Section 121 states in relevant part:

If two or more independent and distinct inventions are claimed in one application, the Commissioner may require the application to be restricted to one of the inventions. If the other invention is made the subject of a divisional application which complies with the requirements of section 120 of this title it shall be entitled to the benefit of the filing date of the original application. A patent issuing on an application with respect to which a requirement for restriction under this section has been made, or on an application filed as a result of such a requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application or against the original application or any patent issued on either of them, if the divisional application is filed before the issuance of the patent on the other application.

U.S.C. Section 121 (1994).

Footnote 12. The first alternative is similar to what Berg did in this case, except here, Berg received the benefit of issuance of the species claims while it appealed the rejection of the separate application with the genus claims.

Footnote 13. Under the current rules, because the term of the patent is 20 years from the date of filing, applicants have every incentive to try to complete prosecution of their applications as quickly as

possible to minimize elapsed time from filing.

- End of Case -

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PATENT ABSTRACTS OF JAPAN

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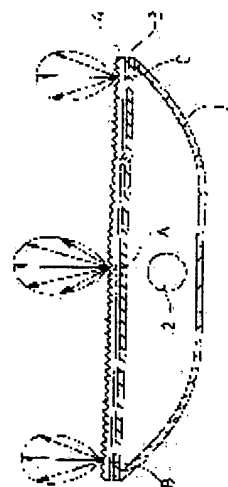
KATO HIDEAKI

(54) ILLUMINATOR

(57)Abstract:

PURPOSE: To obtain a thin and even brightness distribution by forming a regulating board which guides diffused lights emitted from each point on a diffusing board on a side opposite to the light source of the diffusing board so that the regulating board is provided in parallel or integrally with the diffusing board.

CONSTITUTION: The regulating board 4 which respectively and overall guides lights diffused from each point on the diffusing board 3 in a direction vertical to the diffusing board 3 and regulates the spread of the diffusion is formed on the front face of the diffusing board 3 so that the regulating board is provided in parallel or integrally with the diffusing board. For the regulating board 4, a transparent board which is linear on the side of the diffusing board 3, provided with a cross sectional form of a saw tooth shape on the other side and arranged so that the length direction of the part of the saw tooth shape is aligned with the length direction of the linear light source is imagined. Thus since the lights diffused at a large angle can be used and an angle of the diffusing direction narrows, only the



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審査請求 未請求 請求項の数

⑮ 発明の名称 照明装置

⑯ 特 願 平1-76443

⑰ 出 願 平1(1989)3月30日

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明 細 書

1. 発明の名称

照明装置

2. 特許請求の範囲

(1) 反射板と、前記反射板に近接配置した直線状の光源と、前記光源に関して反射板とは反対側に配置した拡散板とよりなる照明装置において、前記拡散板の光源と反対側に拡散板上の各点より発する拡散光の拡がり規制するように各拡散光を導く規制板を並設又は一体に形成したことを特徴とする照明装置。

(2) 前記規制板が、拡散板側が直線と他の側が

液晶を用いた表示装置は、一均一な輝度にて照明する必要が薄型であって一定範囲においてな照明装置が要求される。このする照明装置として、従来第4明装置が知られている。即ち、1a側に蛍光管等の直線状の光に拡散板3を配置したもので、は反射板1にて反射された後拡を、この拡散板3にて拡散光と用いるものである。

このような照明装置は、薄型

特開平

手 続 完 了 証 書

平成 2 年 1 月 22 日

特許庁長官殿

1. 事件の表示

平成 1 年特許願第 076443 号

2. 発明の名称

照 明 装 置

3. 補正をする者

事件との関係

特許出願人

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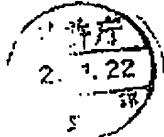
5. 補正命令の日付

自 発

6. 補正により増加する請求項の数 0

7. 補正の対象

明細書の特許請求の範囲、および発明の詳細な説明の欄、並びに図面

方式
密査

特許請求の範囲

(1) 反射板と、前記反射板に近接配置した直線状の光源と、前記光源に隣して反射板とは反対側に配置した拡散板とよりなる照明装置において、前記拡散板の光軸と反対側に拡散板上の各点より発する拡散光の拡がり規制するように各拡散光を導く規制板を並設したことを特徴とする照明装置。

(2) 前記規制板が、拡散板側が直線而他の側が線状の断面形状をした透明板である請求項(1)の照明装置。

7. 補正の内容

(1) 特許請求の範囲を別紙の
(2) 明細書 2 頁 6 行の「反料」に訂正する。

(3) 明細書 3 頁下から 2 行
成」を削除する。

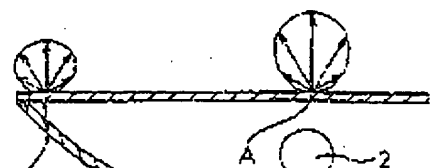
(4) 明細書 7 頁 3 行と 4 行の
入する。

『又、拡散板 3 と規制板 4 は
設する必要がある。この並設
4 へ入射する光の角度は、拡
光の角度に比べて約 60% の
従って、この現象により相対
ものの、輝度効率は大きくア

(5) 明細書 7 頁 9 行乃至 14
・であってもよい。」を削除

(5) 図面第 4 図を別紙の通り

第 4 図



特開平

の角の範囲としては、 $0^\circ < \theta < 60^\circ$ が適当である。この θ の値は、視野角及び輝度効率等の条件設定により決められる。

更に、前述のように、輝度の高い拡散板3の中央の輝度を常として全体として均一な輝度分布にするために、中央部のみ、他の部分よりも θ を大にしてもよい。又使用目的等を考慮して場所により θ の値を異なるようにすることも有効である。

更に、上記実施例においては、拡散板3と規制板4は別体物として並設する場合を述べたが、一方側を透明樹脂材に拡散粒子を混入した材料で拡散層部を形成するようにし、他方側を透明樹脂材で規制層部を形成するようにして、二色成形的に一体成形として形成したものであってもよい。

又、図示する実施例では面4bの各部分が断面直線であるがわずかに凸面又は凹面になっていてもよい。又頂点部分も尖った形状ではなく丸みを持たせてもよい。

〔発明の効果〕

本発明の照明装置は、従来のものでは使用目的

によっては無駄になっていた大る光を利用し得るようにしたもとして拡散方向が小さくなるよ一な輝度分布を保ったまま輝度とが出来、明るく均一な輝度分とが出来る。

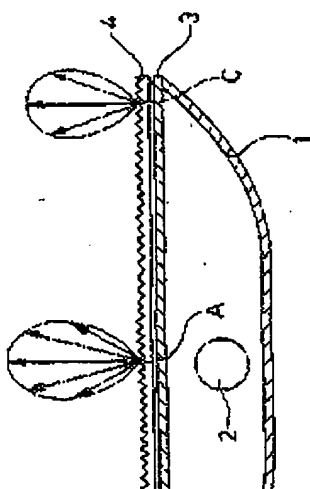
4. 図面の簡単な説明

第1図は本発明の一実施例の第3図は夫々上記実施例で開い拡大して示した断面図、第4図の断面図である。

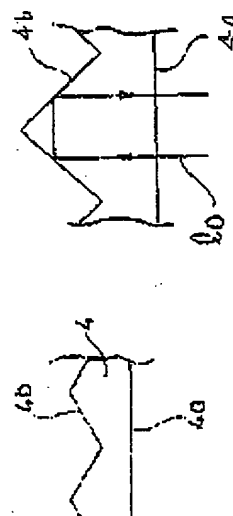
1…反射板、2…光源、3…
板

出願人 第一精工株
代理人 向

第1図



第3図



第4図

